

DUKE POWER COMPANY

P.O. BOX 33189

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HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

March 14, 1984

TELEPHONE  
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Re: Catawba Nuclear Station  
Docket Nos. 50-413 and 50-414

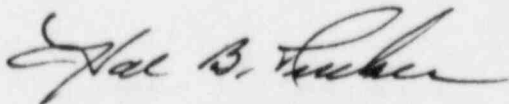
Dear Mr. O'Reilly:

As a result of audits by Duke personnel and discussions with NRC, Region II personnel, Duke has determined that corrective actions and/or enhancements for the operator training program need to be implemented to support licensing of Catawba operators. Attachments 1 through 5 identify deficiencies and proposed corrective actions for the following subject areas:

- 1) Comparison of course content for Cold Certification Group 6 to previous Cold Certification classes
- 2) Core damage mitigation and emergency procedure
- 3) Cold Certification task lists
- 4) Procedure walk-throughs conducted during license preparatory training.

Based on these actions, the revisions to the Catawba FSAR identified in my letter of February 10, 1984 are no longer needed and will not be submitted in Revision 9 to the FSAR.

Very truly yours,



Hal B. Tucker

NAR/ROS/php

Attachments

cc: Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Ms. E. G. Adensam, Chief  
Licensing Branch No. 4

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Mr. James P. O'Reilly, Regional Administrator  
March 14, 1984  
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cc: NRC Resident Inspector  
Catawba Nuclear Station

Mr. Bruce Wilson  
U. S. Nuclear Regulatory Commission  
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854 Henley Place  
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## Attachment 1

### COMPARISON OF COLD CERTIFICATION GROUPS 1 - 5 TO GROUP 6 TRAINING

A review of the Cold License Certification Programs was performed with the following goals.

- 1) Determine differences in topical content in classroom phase;
- 2) Determine differences in simulator experience.

The review was performed in the following manner. Classroom schedules were obtained from Catawba training records and simulator "day-by-day" schedules were obtained from the Technical Training Center. Cold Certificate VI was used as a benchmark for comparison. A list of specific topics shown on the classroom schedule, simulator evolution performed, and classroom topics of special interest (i.e., TMI, S/G overfill, etc.) from the simulator schedule was generated. An item checklist was used to verify the degree of similarity between courses. In cases where a topic was not shown on the schedule, the examinations for that class were reviewed to verify course content.

The topic checksheets were reviewed for major differences between Cold Certification classes. Where significant differences appeared, the Cold License Preparatory schedules were reviewed to assure all license candidates had been exposed to topics/evolutions not covered in their certification classes, at a level consistent with current objectives.

The attached matrix outlines significant differences found. "X" indicates groups where documentation does not exist to verify training was given.

To compensate for these differences, identified classroom training will be administered prior to the written examinations and simulator training will be conducted prior to oral examinations.

# COMPARISON MATRIX

<u>Simulator Malfunction/Scenario</u>	<u>G1</u>	<u>G2</u>	<u>G3</u>	<u>G4</u>	<u>G5</u>
Loss of 125 VAC	X	X	X	X	
Inadvertent Phase 'A'	X	X	X	X	
Impulse Pressure Channel Failure	X	X	X	X	
S/G PORV leak				X	
Failure of ECCS to actuate	X	X	X	X	
Inadequate core cooling	X	X	X	X	
TMI	X	X			
St. Lucie	X	X	X	X	X
Ginna	X	X	X	X	X
Crystal River	X	X	X	X	X
PTS Review	X	X	X	X	X
<u>Classroom</u>					
TMI - 2 Incident	X	X			

CORE DAMAGE MITIGATION AND EMERGENCY PROCEDURE  
TRAINING DISCREPANCIES

No training documentation exists showing that G.A. Smith and M.W. Morgan participated in all mitigating core damage training that other applicants received. However, they have participated in review sessions on this topic.

We request they be allowed to sit for the written exam and receive the remaining training on mitigating core damage after the written exam and before the oral exam, which is consistent with the guidance contained in NUREG-0737.

Robert Ferguson missed approximately two and one half weeks of Segment IV, emergency operating procedures, of Cold License Preparatory training due to sickness. Mr. Ferguson was the individual responsible for overall development of the emergency procedures for Catawba Nuclear Station.

Mr. Ferguson will also serve as a verification team member during the procedure walk-through phase of training after the written examination. During the procedure walk-throughs he will have completed all the learning objectives that he missed during the emergency procedure training. As a result of the above, we request that Mr. Ferguson be exempt from the Emergency Procedure training that he missed and be allowed to sit for the written examination.

COLD CERTIFICATION TASK LIST DISCREPANCIES

The discrepancies identified as a result of our review of the Cold Certification task lists will be resolved and the resolutions will be documented prior to the oral examination.

The name of each individual that had discrepancies on their task list is listed below. In addition, each discrepancy and resolution or projected resolution is identified.

Jack B. Brisson -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test

Resolution:

During discussion with Mr. Brisson on 3/9/84, he indicated that he had observed the Control Rod Drive movement test at McGuire Nuclear Station during observation training

Discrepancy:

Observe the procedure used to acknowledge the following alarms:

- B. Computer

Resolution:

Mr. Brisson had observed the procedure used to acknowledge both annunciator and computer alarms. The single signature indicates that both tasks were completed.

Rick Henry -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test

Resolution:

Mr. Henry did not observe this test during observation training. He will complete an evaluated walk-through on this periodic test at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Donald Bradley -

Discrepancy:

Assist a utility operator working in the following areas:

- C. Radioactive Waste Systems

Resolution:

Mr. Bradley did not perform this task during observation training.  
He will complete this task prior to the oral examination.

Discrepancy:

Calculate the following:

- C. Batch addition of Boric acid or demineralized water
- D. Feed and bleed or blend type borations or dilutions

Resolution:

Mr. Bradley did not perform these tasks. He will perform these tasks prior to the oral examination.

Thomas Moore -

Discrepancy:

Read a dosimeter.

Resolution:

This task was performed but not signed off the task list.

Discrepancy:

Assist a utility operator in the following areas:

- B. Auxiliary Building
- C. Radwaste Systems

Resolution:

Mr. Moore did assist the utility operator in the auxiliary building. However, he did not assist the utility operator in the radwaste systems area. This task will be completed prior to the oral exams.

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test

Resolution:

Mr. Moore did not observe this test during observation training. He will complete an evaluated walk-through on this test at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Thomas Beadle -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test.

Resolution:

During discussions with Mr. Beadle on 3/9/84, he indicated that he had observed the Control Rod Drive movement test at McGuire Nuclear Station during observation training.

David McIntosh -

Discrepancy:

Calculate the following:

- A. Estimated critical rod position
- B. Shutdown margin

Resolution:

During discussion with Mr. McIntosh on 3/9/84, he indicated that these tasks were performed.

Kenneth Beaver -

Discrepancy:

Observe the following tests:

- A. Control Rod Drive movement test
- B. Reactor Coolant leakage
- C. Periodic Instrument Surveillance

Resolution:

Tasks B and C were completed; however, Task A was not done. Mr. Beaver will complete an evaluated walk-through on Task A at Catawba Nuclear Station during the procedure walk-throughs after the written exam.

Discrepancy:

Observe the use of out-of-normal checklist or log.

Resolution:

During discussions with Mr. Beaver, he indicated that he had observed the use of the out-of-normal checklist while on observation training at McGuire Nuclear Station.

Discrepancy:

Calculate an estimated critical rod position.

Resolution:

Mr. Beaver indicated that he has performed an estimated critical rod position while in observation training.



Mike Morgan -

Discrepancy:

Most of the dates were not recorded on the first three pages.  
However, the designated signatures were recorded.

Resolution:

This item was discussed with Mr. Morgan on 3/9/84, and he indicated he had performed all of these tasks.

Mark Ravan -

Discrepancy:

Calculate the following:

- A. Estimated Critical Rod Position
- B. Shutdown Margin
- C. Batch addition of Boric Acid or Demineralized Water.
- D. Feed and Bleed or Blend type Borations or dilutions.

Resolution:

These items were discussed with Mr. Ravan on 3/9/84 and he indicated he had performed these items.

Tommy Kiker -

Discrepancy:

Observe the following periodic tests:

- A. Control Rod Drive movement test
- B. Reactor Coolant Leakage Calculation test
- C. Periodic Instrument Surveillance test

Resolution:

These items were discussed with Mr. Kiker and he indicated that he has not performed them. He will complete an evaluated walk-through on these tests at Catawba Nuclear Station during the procedure walk-throughs after the written examination.

Discrepancy:

Observe the procedure used to acknowledge the following:

- A. Annunciator
- B. Computer

Resolution:

Mr. Kiker has indicated that he has not performed these tasks. They will be completed prior to the oral examination.

Stacy Cooper and Charlie Skinner -

Discrepancy:

Mr. Cooper and Mr. Skinner have no cold certification task lists because they were certified at the Westinghouse Training Facility in Zion, Illinois.

Resolution:

Mr. Cooper and Mr. Skinner will complete the cold certification task lists prior to the oral examination.

H. J. Nicholson -

Discrepancy:

Assist a UO working in the following areas

- A. Secondary side
- B. Auxiliary Building
- C. Radioactive waste systems

Resolution:

Mr. Nicholson had assisted a UO in the above areas. The single signature indicates all tasks completed.

Discrepancy:

Observe the following periodic tests:

- A. Control rod movement test

Resolution:

During discussions with Mr. Nicholson, he indicated that he had observed the Control Rod Movement test while at observation training at McGuire Nuclear Station.

Discrepancy:

Calculate the following:

- A. Estimated critical rod position
- B. Shutdown margin

Resolution:

During discussions with Mr. Nicholson, he indicated that he had calculated ECRP and SDM while at McGuire Nuclear Station.

Attachment 4

LICENSE APPLICANT QUALIFICATION VERIFICATION  
BY PROCEDURE WALK-THROUGHS

The Certification Team (CT) shall consist of the following:

1. Team Leader - Systems Nuclear Production Engineer from our General Office with extensive nuclear operations experience and prior SRO license.
2. Team Members - Operations personnel with extensive nuclear operations experience and holding an SRO on an operating station (McGuire).

The Certification Team (CT) shall conduct certification and oversight duties to commission a station Verification Team (VT).

The Certification Team (CT) Leader shall assign procedure certification responsibilities to Certification Team members in areas as follow:

Area - 1 - Emergency Procedures

Area - 2 - Operating Procedures

Area - 3 - Abnormal and Response Procedures

The (CT) member responsible for an area shall perform certification for all Verification Team members in assigned area.

The certification of a Verification Team (VT) member shall consist of a thorough walk-through of a minimum of one procedure in each area as follows:

1. Emergency Procedures (EP)
2. Operation Procedures (OP)
3. Abnormal Procedures (AP)
4. Response Procedures (RP)

The certification and subsequent verification of qualification shall conclude that the Verification Team members and license applicants are qualified on procedures.

Qualification of license applicants shall be conducted according to the Task Training List included as Attachment 5. The criterion for qualification on a procedure is license applicant comprehension of the following:

1. Purpose
2. Precautions and Limitations
3. Results/effects for a step or series of steps
4. Physical plant/control relationships

The Initial Verification Team consists of members as follow:

1. C. E. Muse            Operating Engineer
2. M. J. Brady        Shift Supervisor
3. C. H. Skinner      Shift Supervisor
4. J. M. Hill         Shift Supervisor
5. S. S. Cooper       Shift Supervisor
6. D. Tower           Operating Engineer (Backup)
7. J. R. Ferguson     Assistant Operating Engineer (Backup)

The Certification Team members may act as Verification Team members. Verification shall be conducted in groups consisting of one verifier to not more than three license applicants. This qualification process will be completed for this initial cold license group prior to the oral examinations. Certification of Verification Team members and verification of license applicant qualifications shall be documented.

The verification of qualification on specified procedures shall be conducted for all future license applicants.

CATAWBA NUCLEAR STATION  
TASK TRAINING  
COLD LICENSE PREPARATION

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Rev. 0

Name \_\_\_\_\_ S.S. No. \_\_\_\_\_ Date Issued \_\_\_\_\_  
Job Classification \_\_\_\_\_ Date Revised \_\_\_\_\_

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
A. EP- Walk through EP's and subprocedures to become familiar with their purpose and content.		
1. EP/1/A/5000/01 - Reactor Trip or Safety Injection		
1A - Reactor Trip Response		
1A1 - Natural Circulation Cooldown		
1B - SI Termination Following Spurious SI		
1C - High-Energy Line Break Inside Containment		
1C1 - SI Termination Following High Energy Line Break Inside Containment		
1C2 - Post-LOCA Cooldown and Depressurization		
1C3 - Transfer to Cold Leg Recirculation		
1C4 - Transfer to Hot Leg Recirculation		
1C5 - Loss of Emergency Coolant Recirculation		
1C6 - LOCA Outside Containment		
1D - Steam Line Break Outside Containment		
1D1 - SI Termination Following Steam Line Break		
1E - Steam Generator Tube Rupture		
1E1 - Post - SGTR Cooldown and Depressurization		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
1E2 - SGTR Alternate Cooldown Using Backfill		
1E3 - SGTR With Continuous NC System Leakage - Subcooled Recovery		
1E4 - SGTR With Continuous NC System Leakage - Saturated Recovery		
1E5 - SGTR Without Pressurizer Pressure Control		
1E6 - SGTR Cooldown Using ND		
2. EP/1/A/5000/02 - Critical Safety Function Status Trees		
2A - Subcriticality		
2A1 - Nuclear Power Generation/ATWS		
2A2 - Loss of Core Shutdown		
2B - Core Cooling		
2B1 - Inadequate Core Cooling		
2B2 - Degraded Core Cooling		
2B3 - Saturated Core Cooling Conditions		
2C - Heat Sink		
2C1 - Loss of Secondary Heat Sink		
2C2 - Steam Generator Overpressure		
2C3 - Steam Generator High Level		
2C4 - Loss of Normal Steam Release Capabilities		
2C5 - Steam Generator Low Level		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
2D - Reactor Coolant Integrity		
2D1 - Imminent Pressurized Thermal Shock Conditions		
2D2 - Anticipated Pressurized Thermal Shock Conditions		
2D3 - High Pressurizer Pressure		
2E - Containment		
2E1 - High Containment Pressure		
2E2 - High Containment Sump Level		
2E3 - High Containment Radiation Level		
2F - Inventory		
2F1 - Pressurizer Flooding		
2F2 - Low System Inventory		
2F3 - Voids in Reactor Vessel		
3. EP/1/A/5000/03 - Loss of All AC Power		
3A - Loss of All AC Power Recovery Without SI Required		
3B - Loss of All AC Power Recovery With SI Required		
B. RP- Walk through the following RP's to become familiar with their purpose and content.		
1. RP/0/A/5000/01 - Classification of Emergency		
2. RP/0/A/5000/02 - Notification of Unusual Event		
3. RP/0/A/5000/03 - Alert		



CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

	TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
4.	RP/0/A/5000/04 - Site Area Emergency		
5.	RP/0/A/5000/05 - General Emergency		
6.	RP/0/A/5000/06 - Natural Disaster		
7.	RP/0/A/5000/07 - Earthquake		
8.	RP/0/A/5000/08 - Release of Toxic or Flammable Gas		
9.	RP/0/A/5000/09 - Collision/ Explosion		
10.	RP/0/A/5000/10 - Conducting a Site Assembly		
11.	RP/0/A/5000/11 - Offsite Dose Projections Without OAC		
G.	AP- Walk through the following AP's and become familiar with their content.		
1.	AP/1/A/5500/02 - Turbine Generator Trip		
2.	AP/1/A/5500/03 - Load Rejection		
3.	AP/1/A/5500/04 - Loss of Reactor Coolant Pump		
4.	AP/1/A/5500/05 - ECCS Actuation During Plant Shutdown		
5.	AP/1/A/5500/06 - Loss of S/G Feedwater		
6.	AP/1/A/5500/07 - Loss of Normal Power		
7.	AP/1/A/5500/08 - Malfunction of Reactor Coolant Pump		
8.	AP/1/A/5500/10 - Reactor Coolant System Leak		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
9. AP/1/A/5500/11 - Inadvertent NC System Depressurization		
10. AP/1/A/5500/12 - Loss of Charging or Letdown		
11. AP/1/A/5500/13 - Boron Dilution		
12. AP/1/A/5500/14 - Control Rod Misalignment		
13. AP/1/A/5500/15 - Rod Control Malfunctions		
14. AP/1/A/5500/16 - Malfunction of Nuclear Instrumentation System		
15. AP/1/A/5500/17 - Loss of Control Room		
16. AP/1/A/5500/18 - High Activity In Reactor Coolant		
17. AP/1/A/5500/19 - Loss of Residual Heat Removal System		
18. AP/1/A/5500/20 - Loss of Nuclear Service Water		
19. AP/1/A/5500/21 - Loss of Component Cooling		
20. AP/1/A/5500/22 - Loss of Instrument Air		
21. AP/1/A/5500/23 - Loss of Condenser Vacuum		
22. AP/1/A/5500/24 - Loss of Containment Integrity		
23. AP/1/A/5500/25 - Spent Fuel Damage		
24. AP/0/A/5500/26 - Estimate of Failed Fuel Based on I-131 Concentration		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS		DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
25. AP/0/A/5500/33 - Damaged or Missing Tamper Seals on Special Nuclear Material Shipments			
D. OP-	Walk through and become familiar with the following Operating Procedures	N/A	N/A
1.	OP/1/A/6100/01 - Unit Startup		
	a. Mode 4 Checklist		
	b. Pre-heatup Checklist		
	c. Mode 3 Checklist		
	d. Mode 1 & 2 Checklist		
	e. Precriticality Checklist		
2.	OP/1/A/6350/01 - Normal Power Checklist		
	a. Normal electrical alignment.		
3.	OP/1/A/6150/01 - Fill and Vent of NC System		
	a. Filling NC System in C.R.		
	b. Venting NC System		
4.	OP/1/A/6200/09 - CLA Operation		
	a. Alignment for SS Actuation		
	b. Level/Pressure Changes		
5.	OP/1/A/6200/04 - Residual Heat Removal System		
	a. Startup of ND During Cooldown		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
b. Shutdown and Alignemnt for Standby Readiness		
c. Establishing ND PZR Spray		
d. Alternate Power to 1ND-37A and 1ND-1B Shifting ND Trains.		
6. OP/1/A/6400/05 - KC		
a. System Startup and Shutdown		
b. Shifting Trains and Parallel Operation		
7. OP/1/A/6250/01 - CM/CF		
a. Condensate Startup		
b. Feedwater Startup		
c. Feedwater Pump Startup and Shutdown		
d. CM/CF Shutdown		
e. Condensate Storage System Operations		
8. OP/1/A/6430/01 - Cont Ventilation System		
a. Startup, Operation and Shutdown		
9. OP/1/A/6200/06 - NI		
a. Placing in Standby Readiness		
b. Removing from Standby Readiness		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
10. OP/1/A/6200/10 - UHI		
a. Adjusting Pressures and Levels		
b. Operation of Hydraulic Isolation Valves		
c. Placing and Removing From Service		
11. OP/1/A/6200/07 - NS		
a. Placing NS in Standby Alignment		
b. Removing NS From Standby Alignment		
12. OP/1/A/6200/14 - FW		
a. Normal Operation		
b. Makeup to FWST		
c. Purification of FWST		
13. OP/1/A/6200/01 - Chemical and Volume Control System		
a. Establishing Charging and Seal Injection		
b. Establishing Letdown and Securing ND Letdown		
c. Shifting Mixed Bed Demine- ralizers & Saturations of Mixed Bed		
d. Establishing/Securing Excess Letdown		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
e. Shifting the Operating Charging Pump		
f. Shifting Charging Flow Paths		
g. Operation of NV Auxiliary Spray		
14. OP/1/A/6150/02A - Reactor Coolant Pump Operation		
a. Startup, Operation and Shutdown of NCP's		
b. Filling and Draining of NC Pump Standpipes		
15. OP/1/B/6300/01 - Turbine Generator		
a. Turbine Generator Startup		
b. Transferring Manual/Auto Modes		
c. Shutdown of turbine generator.		
16. OP/1/A/6100/03 - Unit Operation		
a. Load Changes from 15% to 100%.		
17. OP/1/A/6100/02 - Controlling Procedure for Unit Shutdown		
a. Unit Shutdown		
18. OP/1/A/6250/02 - Auxiliary Feedwater System		
a. Placing/Removing Standby Readiness		
b. Pump Operations		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
19. OP/1/A/6100/05 - Unit Fast Recovery		
20. OP/1/A/6150/08 - Rod Control		
a. Startup, paralleling and shutdown of Control Rod drive M-G sets.		
b. Dropped Rod Retrieval		
21. OP/1/A/6350/02 - Diesel Generator Operation		
a. Alignment for ES Actuation		
b. Local Startup and Shutdown		
c. Remote Startup and Shutdown		
d. Emergency Step		
e. Removing/Returning From Service		
f. Shutdown After Auto Start		
22. OP/1/A/6450/10 - Containment Hydrogen Control Systems		
a. Alignment for Standby Operation		
b. Operations After LOCA		
23. OP/1/A/6450/15 - Containment Purge System		
a. Purge System Operations		
24. OP/1/A/6450/17 - Containment Air Release and Addition		
a. Addition and Release Modes		



CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
25. OP/1/A/6700/03 - Operating with OAC Out of Service		
26. OP/1/A/6100/04 - S/D From Outside Control Room From Hot Standby to Cold S/D.  a. Shutdown and Cooldown		
27. OP/1/A/6700/01 - Unit Data Book  a. Index		
28. OP/0/A/6550/17 - Fuel Component Handling Tools  a. New Fuel Tool  b. New Rod Control Tool  c. RCC Thimble Plug Tool  d. BPRA Tool		
29. OP/0/A/6550/09 (RCCA Change Fixture Operations)  a. RCC Assembly Transfer  b. RCC Assembly Storage  c. RCC Assembly Removal From Storage		
30. OP/0/A/6550/08 - Fuel Trans- fer System Operation  a. Startup of Fuel Transfer System  b. Transfer of Fuel Assemblies Rx/SFP  c. Securing Fuel Transfer System		



CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
31. OP/0/A/6550/07 - Reactor Building Manipulator Crane Operation		
a. Startup of Manipulator Crane		
b. Fuel Mast & RCC Mast Operation		
c. Transferring Thimble Plug With RCC Mast		
d. RCC Thimble Plug Handling Tool		
e. Securing Manipulator Crane		
32. OP/0/A/6550/04 - Transferring New Fuel to the Elevator		
a. Transfer of New Fuel to Elevator		
33. OP/1/A/6550/06 - Transferring Fuel With the Spent Fuel Manipulator Crane.		
a. Startup of the Spent Fuel Pool Manipulator Crane		
b. Transferring Fuel		
c. Securing the Spent Fuel Pool Manipulator Crane		
34. OP/0/A/6550/16 - Overhead Fuel Building Cranes		
a. Inspection of 10/125 Ton Crane		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
b. Operation of 10/125 Ton Crane		
c. Shutdown		
d. Operation of Digital Weight Indicator		
e. Inspection of Wire Sling Rope		
35. OP/1/A/6100/09A - Annunciator Response for 1A D/G Panel		
36. OP/1/A/6150/04 - Pressurizer Relief Tank		
a. Establishing Normal Operating Conditions		
b. Level Adjustment		
c. Cooling		
d. Venting and Purging		
37. OP/1/A/6150/09 - Boron Concentration Control		
a. Modes of Makeup to NV System		
b. Boric Acid Tank Operation		
38. OP/1/A/6150/10 - Loose Parts Monitoring		
39. OP/1/A/6200/05 - Spent Fuel Cooling System		
a. Startup and Normal Operation		
b. Shutdown		
c. Makeup		
d. Skimmer Loop Operation		

CATAWBA NUCLEAR STATION  
TASK TRAINING DATA  
COLD LICENSE PREPARATION

TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
40. OP/1/A/6200/12 - Reactor Makeup Water System		
a. Alignment for Operation		
b. Makeup		
c. Recirculation		
41. OP/1/A/6250/06 - Main Steam		
a. Alignment for Unit Heatup		
42. OP/1/A/6250/08 - Steam Generator Blowdown		
a. Establishing Blowdown		
b. Securing Blowdown		
43. OP/1/A/6350/05 - Alternate AC Power Sources		
a. 13.8 KV		
b. 6.8 KV		
c. 4160 V		
d. 600 V		
44. OP/1/A/6350/08 - 125 VDC/ 120 VAC Vital Instrument and Control Power System		
a. Charger Operation		
b. Inverter Operation		
c. Battery Equalization Charge		
45. OP/1/A/6550/01 - Diesel Generator Fuel Oil System Operation		
a. Normal Alignment		
b. Filling Storage Tanks		

CATAWBA NUCLEAR STATION  
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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
c. Draining Storage Tanks		
d. Recirculating Storage Tanks		
e. Shifting Storage Tanks		
f. Condensate Removal From Storage Tanks		
46. OP/1/B/6100/10X - Annunciator Response For Radiation Monitor Panel 1RAD-1		
47. OP/1/B/6100/10Y - Annunciator Response for Radiation Monitor Panel 1RAD-2		
48. OP/1/B/6100/10Z - Annunciator Response for Radiation Monitor Panel 1RAD-3		
49. OP/0/A/6400/06C - Nuclear Service Water System		
a. Startup		
b. Shutdown		
c. Starting/Securing Additional Pumps		
50. OP/0/A/6450/03 - Auxiliary Building Ventilation System		
a. Startup and Operation		
b. Shutdown		
51. OP/0/A/6450/05 - Instrument Air System		
a. Startup/Shutdown of Compressors		
b. Shifting Compressor Modes		
c. Startup/Shutdown of Dryers		

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TRAINING TASKS	DATE PERFORMED SATISFACTORILY	DESIGNATED SIGNATURE
52. OP/0/A/6500/19 - Operations Waste Gas Release		
53. OP/0/B/6500/14 - Operations Liquid Waste Release		
54. OP/0/B/6100/13 - Standby Shutdown Facility Operations		
a. Unit 1 to Hot Standby		
b. SSF on Loss of All AC Power		
55. OP/0/B/6400/02A - Fire Protection		
a. Startup and Normal Operations		
b. Draining Containment Header		
c. Reset of Various Types of Fire Valves		
56. OP/0/B/6400/03 - Low Pressure Service Water System		
a. Startup		
b. Shutdown		
c. Shifting Running Pumps		
d. RL Turnaround Valve Operations		
57. OP/0/B/6450/23 - Auxiliary Building Cooling Water System		
a. Startup		
b. Shutdown		
c. Shifting of Operating Equipment		